MEMORANDUM FOR: Distribution Email

FROM: Christine Caruso Magee
                                     Configuration Manager, NCEP Central Operations

SUBJECT: Scheduled Operational Changes and Upgrades for
                                     CPC, OPC, and WPC

Climate Prediction Center

The following accelerated items were implemented this past week:

None

The following will be implemented the week of May 16, 2016:

RFC #657 – shell script v2.1.2 - The legacy Palmer process produces graphics using ancient NCAR-graphics. A new GIS process has replaced this image production, so it is no longer needed. This change will remove the commands that copy the obsolete images to the Web Mirror, to avoid any potential for the newer images to get overwritten (e.g., during a rerun).   To be implemented on May 17 at 1500Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of May 16, 2016 may affect CPC:

RFC #1929 – HPSS v502p4 – On WCOSS (Crays), the production HPSS module file currently points to the /usr/local/hpss directory. This module file will be re-oriented to reference the /usrx/local/prod/hpss directory. Was to be implemented on May 12 at 1800Z; pushed back to May 16 due to other work being done on WCOSS.

RFC #1943 - Update DBNet on the NOMADS/ftpprd processing machines to keep a week's worth of valid datasets as requested by the CCPA developer. The CCPA (Climatologically Calibrated Precipitation Analysis) is produced in a non-chronological manner and the current cleanup on NOMADS/ftpprd is not accounting for this correctly, resulting in gaps in the current dataset that's available to users. To be implemented on May 16 at 1400Z.

RFC #1948 - Update Tide/Gyre DCS3700 disk storage subsystems that comprise the /sss GPFS file system. This will improve long term DCS3700 maintenance support. Additionally this upgrade includes improvements to the internal battery test process that support feels will improve the battery fallout issues. There will be two 5-hour outages to perform this work (one outage for Tide, one for Gyre). To be implemented beginning May 18 at 1200Z and should be completed by 1200Z on May 19.

The following NCO RFCs are in progress and may affect CPC:

RFC #1864 – WCOSS – Work is being done on the Crays to add 2 new service blades containing 2 nodes each for DVS/GPFS services. This work should be completed by May 31.

Ocean Prediction Center

The following accelerated items were implemented this past week:

RFC #650 – check_computer_health.csh v2016.05.09 – Updated the notification threshold for Compute Farm disk space usage to prevent text messages to OAB support staff. Implemented on May 9 at 2300Z.

RFC #651 – NA_cleanup.opc.csh v2016.05.10 – Adjusted the purge rules for AWIPS processing and for NCOM data files that were not being cleaned up. They were contributing to an OPC disk filling up. Implemented on May 10 at 1725Z.

The following will be implemented the week of May 16, 2016:

RFC #630 – opc_woc_mirrors_monitor.pl v2016.04.25 - Disable the crontab that monitors the WOC mirror web farms. OPC will be hosting its website directly from NCWCP infrastructure beginning April 25, 2016. Was to be implemented on April

25 at 1130Z; new implementation date is TBD, but implementation is expected to occur this week once a firm date has been set for NCO's related work on the OPC website (see NCO RFC #1949 below)

RFC #652 - Add a new OPC webpage called "Publications" which has links to 2 new pages. Remove the out-of-date "General Information" pages. To be implemented on May 16 at 1130Z.

RFC #653 – A new web page, "get_to_know_JPhillips.php", will be added to the external website (opcrzdm). A link will be added to it on the current "get_to_know_OPC.php" page.   To be implemented on May 17 at 1200Z.

RFC #654 – max_wind_speeds.pl v16.05.16 - Change GFS maximum wind speed CF/IDP processing to process hourly GFS. This change is being made so that the maximum wind speeds software can process the new hourly GFS model output, and also adds overlapping time period processing to the existing consecutive time period processing. The three existing C-Shell scripts that perform this processing currently are being replaced by a single Perl script. To be implemented on May 16 at 1400Z.

RFC #655 - ncom_haw.csh and ncom_socal.csh v2016.05.16 - Migrate the NetCDF to GRIB 2 processing from WCOSS to the OPC compute farm for NCOM hawaii and socal files. Post the NCOM SST and currents GRIB2 files on the OPC ftp site for mariners. To be implemented on May 16 at 1400Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of May 16, 2016 may affect OPC:

RFC #1948 - Update Tide/Gyre DCS3700 disk storage subsystems that comprise the /sss GPFS file system. This will improve long term DCS3700 maintenance support. Additionally this upgrade includes improvements to the internal battery test process that support feels will improve the battery fallout issues. There will be two 5-hour outages to perform this work (one outage for Tide, one for Gyre). To be implemented beginning May 18 at 1200Z and should be completed by 1200Z on May 19.

RFC #1949 - OPC has requested that www.opc.ncep.noaa.gov be migrated to IDP from the WOC. The site is already configured at IDP. IWSB just needs to

update the DNS record to point to IDP. Exact implementation date is TBD but is expected to occur this week.

The following NCO RFCs are in progress and may affect OPC:

RFC #1864 – WCOSS – Work is being done on the Crays to add 2 new service blades containing 2 nodes each for DVS/GPFS services. This work should be completed by May 31.

The following NCO RFCs, which may affect OPC, were approved with an implementation date TBD:

RFC #1357 – RTOFS global v1.1.0 – Major upgrade of the Global RTOFS model. See the TIN at: http://www.nws.noaa.gov/os/notification/tin15-36global-rtofsaaa.htm for details. This was advertised as having an October 6 implementation date but this implementation is being postponed due to a delay in the Navy's HYCOM model upgrade. Once the HYCOM upgrade is implemented, the Global RTOFS will be scheduled for implementation. The Navy hopes to upgrade HYCOM in FY16Q3. Notification will be given in advance so users may prepare for any changes which may affect them. This upgrade of the Global RTOFS was approved by the NCEP Director.

Weather Prediction Center

The following accelerated items were implemented this past week:

None

The following will be implemented the week of May 16, 2016:

RFC #656 – NMAP v5.17.16 - Add restore files to NMAP for the SPC SREF in $MODEL. This will approximate the SPC tool located on the SPC website in the WPC NMAP display for easier use. To be implemented on May 17 at 1200Z.

The following RFCs are in progress:

RFC #637 - Add new scripts to the Compute Farm which will read a grib2 data set created by the Denver SOO, containing Quasi-Geostrophic (QG) omega and other QG diagnostics for the NAM, GFS and EC, and then convert this data to GEMPAK grid files for display in NMAP for WPC forecasters. NCO/IDSB/Dataflow is bringing this data in from NWS Central Region and it's being stored on IDP. The WPC scripts will read the data from IDP. Implementation began May 3 at 1600Z and should be completed by May 17.

RFC #649 - EMC is making a beta version of the GEFS which contains bias corrected QPF and PQPF. EMC is also making this data available downscaled to 5km. WPC will pipe the grib2 data (QPF and PQPF only) to the Compute Farm, where it will be de-gribbed and made available in NMAP2 for the FFaiR and WPC forecasters for testing. Implementation began May 12 at 1600Z and should be completed by May 26.

The following NCO RFCs to be implemented the week of May 16, 2016 may affect WPC:

RFC #1943 - Update DBNet on the NOMADS/ftpprd processing machines to keep a week's worth of valid datasets as requested by the CCPA developer. The CCPA (Climatologically Calibrated Precipitation Analysis) is produced in a non-chronological manner and the current cleanup on NOMADS/ftpprd is not accounting for this correctly, resulting in gaps in the current dataset that's available to users. To be implemented on May 16 at 1400Z.

The following NCO RFCs are in progress and may affect WPC:

None

Please note that security-related RFCs are never listed in the RFC memo.

---- OPERATIONAL ANNOUNCEMENTS ----

1. The CPC/OPC/WPC Configuration Management documents are available at https://sites.google.com/a/noaa.gov/nws-ncep-nco-cm/.

    Please review these documents if you have questions prior to submitting changes for CPC/OPC/WPC configurable items.

2. Users who wish to view their network utilization via the Scrutinizer appliance may request access from NCO/IWSB. Please send an account request to the NCWCP Helpdesk at NCWCP.helpdesk@noaa.gov.